**AMENDMENTS TO THE CLAIMS**

The following is a complete, marked up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A computer readable medium storing an executable data structure for managing reproduction of at least video data having multiple reproduction paths ~~recorded on the computer readable medium~~ by a reproduction device, comprising:

a data area for storing stream files, the stream files including at least a portion of the video data having multiple reproduction paths, the video data having multiple reproduction paths being divided into one or more interleaving units, each interleaving unit associated with one of the reproduction paths, the interleaving units associated with different reproduction paths being interleaved in the data area, and the video data in each interleaving unit being divided into ~~one or more~~ entry points;

a playlist area for storing playlist files, the playlist file including at least one playitem, the playitem identifying a playing interval in [[a]] at least one clip of the video data, the playitem indicating at least one clip information file for an associated reproduction path used by the corresponding playitem; and

a clip information area for storing clip information files, the clip information files for managing reproduction of the video data having multiple reproduction paths by the reproduction device, the clip information file including an entry point map associated with corresponding one reproduction path of the multiple reproduction paths, the entry point map mapping a presentation time stamp to an address for a corresponding entry point of the video data, each entry point map associated with a

corresponding stream file and identifying the entry points in the video data for the associated reproduction path, the stream file, the clip information file, and the playlist file including different file extensions from one another.

2. (Previously Presented) The computer readable medium of claim 1, wherein the video data having multiple reproduction paths is divided into a plurality of stream files, each stream file including video data associated with one of the multiple reproduction paths, and each stream file divided into one or more of the interleaving units.

3. (Cancelled)

4. (Previously Presented) The computer readable medium of claim 1, wherein each interleaving unit in at least one stream file includes a same number of entry points.

5. (Previously Presented) The computer readable medium of claim 1, wherein at least two interleaving units in at least one stream file have a different number of entry points.

6. (Cancelled)

7. (Previously Presented) The computer readable medium of claim 1, wherein each entry point map indicates which of the identified entry points is a last entry point in an interleaving unit.

8. (Previously Presented) The computer readable medium of claim 1, wherein each

entry point map indicates which of the identified entry points is a first entry point in an interleaving unit.

9. (Previously Presented) The computer readable medium of claim 1, wherein the entry point maps are aligned in time.

10. (Previously Presented) The computer readable medium of claim 2, wherein at least one interleaving unit starting and ending with a reproduction path change point.

11-13. (Cancelled)

14. (Currently Amended) A computer readable medium storing an executable data structure for managing reproduction of at least video data having multiple reproduction paths ~~recorded on the computer readable medium~~ by a reproduction device, comprising:

a data area for storing a plurality of stream files, each stream file including video data associated with one of the multiple reproduction paths, each stream file divided into entry points of video data, the entry points in each stream file being grouped into one or more interleaving units, and the plurality of stream files being interleaved in the data area on a interleaving unit basis, each interleaving unit being divided into entry points;

a playlist area for storing playlist files, the playlist file including at least one playitem, the playitem identifying a playing interval in a clip of the video data, the playitem indicating at least one clip information file for an associated reproduction path used by the corresponding playitem; and

a clip information area for storing clip information files, the clip information

files for managing reproduction of the video data having multiple reproduction paths by the reproduction device, the clip information file including an entry point map associated with corresponding one reproduction path of the multiple reproduction paths, the entry point map mapping a presentation time stamp to an address for a corresponding entry point of the video data, each entry point map associated with a corresponding stream file and identifying the entry points in the video data for the associated reproduction path, the stream file, the clip information file, and the playlist file including different file extensions from one another.

15. (Previously Presented) The computer readable medium of clam 14, wherein each interleaving unit in at least one stream file includes a same number of entry points.

16. (Previously Presented) The computer readable medium of claim 14, wherein at least two interleaving units in at least one stream file have a different number of entry points.

17. (Currently Amended) A computer recordable medium storing an executable data structure for managing reproduction of at least video data having multiple reproduction paths ~~recorded on the computer readable medium~~ by a reproduction device, comprising:

a data area for storing stream files, the stream files including at least a portion of the video data having multiple reproduction paths, the video data having multiple reproduction paths being divided into one or more interleaving units, each interleaving unit associated with one of the reproduction paths, each interleaving unit being formed of ~~a number of~~ entry points, and the interleaving units associated with different reproduction paths being interleaved in the data area;

a playlist area for storing playlist files, the playlist file including at least one playitem, the playitem identifying a playing interval in a clip of the video data, the playitem indicating at least one clip information file for an associated reproduction path used by the corresponding playitem; and

a clip information area storing clip information files, the clip information files for managing reproduction of the video data having multiple reproduction paths by the reproduction device, the clip information file including an entry point map associated with corresponding one reproduction path of the multiple reproduction paths, the entry point map mapping a presentation time stamp to an address for a corresponding entry point of the video data, each entry point map associated with a corresponding stream file and identifying the entry points in the video data for the associated reproduction path, the stream file, the clip information file, and the playlist file including different file extensions from one another.

18. (Previously Presented) The computer readable medium of claim 17, wherein the number of entry points is fixed for at least interleaving units associated with a same reproduction path.

19. (Previously Presented) The computer readable medium of claim 17, wherein the number of entry points varies for at least interleaving units associated with a same reproduction path.

20. (Currently Amended) A method of recording a data structure for managing reproduction of at least video data having multiple reproduction paths on a recording medium, comprising:

recording playlist files in a playlist area of the recording medium, the playlist file including at least one playitem, the playitem identifying a playing interval in a clip of the video data, the playitem indicating at least one clip information file for an associated reproduction path used by the corresponding playitem;

recording the clip information files in a clip information area of the recording medium, the clip information files for managing reproduction of the video data having multiple reproduction paths, the clip information file including an entry point map associated with corresponding one reproduction path of the multiple reproduction paths, the entry point map mapping a presentation time stamp to an address for a corresponding entry point of the video data, each entry point map associated with a corresponding stream file and identifying the entry points in the video data for the associated reproduction path, the stream file, the clip information file, and the playlist file including different file extensions from one another; and

recording stream files in a data area of the recording medium, the stream files including at least a portion of the video data having multiple reproduction paths, the video data having multiple reproduction paths being divided into one or more interleaving units, each interleaving unit associated with one of the reproduction paths, and the interleaving units associated with different reproduction paths being interleaved in the data area, and the video data in each interleaving unit being divided into ~~one or more~~ entry points.

21. (Currently Amended) A method of reproducing a data structure for managing reproduction of at least video data having multiple reproduction paths recorded on a recording medium, comprising:

reproducing at least one playlist file~~s~~ from a playlist area of the recording medium, the playlist file including at least one playitem, the playitem identifying a

playing interval in a clip of the video data, the playitem indicating at least one clip information file for an associated reproduction path used by the corresponding playitem;

reproducing the clip information files from a clip information area of the recording medium, the clip information files for managing reproduction of the video data having multiple reproduction paths, the clip information file including an entry point map associated with corresponding one reproduction path of the multiple reproduction paths, the entry point map mapping a presentation time stamp to an address for a corresponding entry point of the video data, each entry point map associated with a corresponding stream file and identifying the entry points in the video data for the associated reproduction path, the stream file, the clip information file, and the playlist file including different file extensions from one another; and

reproducing stream files from a data area of the recording medium, the stream files including at least a portion of the video data having multiple reproduction paths, the video data having multiple reproduction paths being divided into one or more interleaving units, each interleaving unit associated with one of the reproduction paths, and the interleaving units associated with different reproduction paths being interleaved in the data area, and the video data in each interleaving unit being divided into ~~one or more~~ entry point<u>s</u>.

22. (Currently Amended) An apparatus for recording a data structure for managing reproduction of at least video data having multiple reproduction paths on a recording medium, comprising:

an optical pickup configured to record data on the recording medium; and

a controller, operably coupled to the optical pickup, configured to record playlist files in a playlist area of the recording medium, the playlist file including at

least one playitem, the playitem identifying a playing interval in a clip of the video data, the playitem indicating at least one clip information file for an associated reproduction path used by the corresponding playitem;

the controller configured to control the optical pickup to record clip information files in a clip information area of the recording medium, the clip information files for managing reproduction of video data having the multiple reproduction paths, the clip information file including an entry point map associated with ~~a~~ corresponding one reproduction path of the multiple reproduction paths, the entry point map mapping a presentation time stamp to an address for a corresponding entry point of the video data, each entry point map associated with a corresponding stream file and identifying the entry points in the video data for the associated reproduction path, the stream file, the clip information file, and the playlist file including different file extensions from one other, and

the controller configured to control the optical pickup to record stream files in a data area of the recording medium, the stream files including at least a portion of the video data having multiple reproduction paths, the video data having multiple reproduction paths being divided into one or more interleaving units, each interleaving unit associated with one of the reproduction paths, the interleaving units associated with different reproduction paths being interleaved in the data area, and the video data in each interleaving unit being divided into ~~one or more~~ entry points.

23. (Currently Amended) An apparatus for reproducing a data structure for managing reproduction of at least video data having multiple reproduction paths recorded on a recording medium, comprising:

an optical pickup configured to reproduce data recorded on the recording medium;

a controller, operably coupled to the optical pickup, configured to control the optical pickup to reproduce at least one playlist files in a playlist area of the recording medium, the playlist file including at least one playitem, the playitem identifying a playing interval in a clip of the video data, the playitem indicating at least one clip information file for an associated reproduction path used by the corresponding playitem;

the controller configured to control the optical pickup to reproduce clip information files from a clip information area of the recording medium, the clip information files for managing reproduction of the video data having multiple reproduction paths, the clip information file including an entry point map associated with corresponding one reproduction path of the multiple reproduction paths, the entry point map mapping a presentation time stamp to an address for a corresponding entry point of the video data, each entry point map associated with a corresponding stream file and identifying the entry points in the video data for the associated reproduction path, the stream file, the clip information file, and the playlist file being logically separate; and

the controller configured to control the optical pickup to reproduce stream files from a data area of the recording medium, the stream files including at least a portion of the video data having multiple reproduction paths, the video data having multiple reproduction paths being divided into one or more interleaving units, each interleaving unit associated with one of the reproduction paths, the interleaving units associated with different reproduction paths being interleaved in the data area, and the video data in each interleaving unit being divided into ~~one or more~~ entry points.

24. (Previously Presented) The apparatus of claim 22, wherein each interleaving unit in at least one stream file includes a same number of entry points.

25. (Previously Presented) The apparatus of claim 22, wherein at least two interleaving units in at least one stream file have a different number of entry points.

26. (Previously Presented) The apparatus of claim 23, wherein each interleaving unit in at least one stream file includes a same number of entry points.

27. (Previously Presented) The apparatus of claim 23, wherein at least two interleaving units in at least one stream file have a different number of entry points.

28. (Previously Presented) The method of claim 20, wherein the video data having multiple reproduction paths is divided into a plurality of stream files, each stream file including video data associated with one of the multiple reproduction paths, and each stream file divided into one or more of the interleaving units.

29. (Previously Presented) The method of claim 21, wherein the video data having multiple reproduction paths is divided into a plurality of stream files, each stream file including video data associated with one of the multiple reproduction paths, and each stream file divided into one or more of the interleaving units.

30. (Previously Presented) The apparatus of claim 22, further comprising:
an encoder configured to encode the video data having multiple reproduction paths.

31. (Previously Presented) The apparatus of claim 22, further comprising:
a source packetizer configured to packetize the video data.

32. (Previously Presented) The apparatus of claim 23, further comprising:

a source de-packetizer configured to de-packetize a packet of the video data.

33. (Previously Presented) The method of claim 20, wherein at least one interleaving unit starting and ending with a reproduction path change point.